



## *In the United States Patent and Trademark Office*

In re application of: <b>Jacob Oaknin</b>	
For: <b>Efficient Single Photon Emission Imaging</b>	
Serial No.~ Confirm: <b>10/752,978 ~ 4813</b>	Group: <b>2878</b>
Filed on: <b>Jan 7, 2004</b>	Examiner: <b>Marcus Tanningco</b>
Correspondence Date <b>August 24, 2005</b>	Docket: <b>0402US-OAKNIN</b>

### **Information Disclosure Statement under 37 CFR 1.97**

Honorable Director for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Information Disclosure Statement is submitted pursuant with 37 CFR §1.97, 1.98. It is requested that the information disclosed herein be made of record in this application. It is further requested that the information set forth in this statement and in the listed documents be considered during the pendency of the above-identified application, and any other applications cross referencing, relying on the priority of, or otherwise related to the above-identified application.

The accompanying documents were cited in a related patent application, as well as documents required to represent the state of the art to provide a response to points raised by Examiner. The documents represent the closest information known to the applicant at this time, that was not previously disclosed to the Office. In accordance with 37 CFR §1.97(g) and (h), the filing of this IDS should not be construed as a representation that a search has been made or that the information cited is, or is considered to be, material to patentability as defined in 37 CFR §1.56(b), nor should it be construed that any information cited herein or in the attached document is (or constitutes) "prior art" for this invention unless specifically otherwise indicated.

No explanation of relevance is necessary for documents in the English language (see 37 CFR 1.98(a)(3)(i)).

Our understanding is that no fee is due in connection with this submission. If this understanding is incorrect, the director is hereby requested and authorized to charge

---

---

any fee, or credit any overpaid amount, to Deposit Account No. 501392, as needed to maintain the application in good standing in the Office.

In accordance with 37 CFR § 1.98, this IDS includes a list (e.g. form PTO-1449, or equivalent), together with copies, of all patents, publications, or other information submitted for consideration by the office, either incorporated into this IDS or as an attachment thereto. However no copies of US patents or published patent application are attached in accordance with office policy.

Consideration of the foregoing in relation to this application is respectfully requested.

Respectfully submitted



Shalom Wertsberger

Reg. Num 43,359

30 Fern Lane

South Portland, ME

04106

Phone: (207) 799-9733

Fax: (207) 767-5324

Agent for Applicant

Please type a plus sign (+) inside this box --> +



Substitute for form 1449A/PTO			<i>Complete if Known</i>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(Use as many sheets as necessary)</i>			Application Number	10/752,978	
			Filing Date	1/7/2004	
			First Named Inventor	Jacob Oaknin	
			Group Art Unit	2878	
			Examiner Name	Marcus Taningco	
Sheet	1	of	3	Attorney Docket Number	0402US-Oaknin

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages Columns Lines Where relevant passages or relevant figures appear
		Number	Kind Code (If Known)			
	AA	6,040,580		Watson et al.	03/2000	
	AB	6,028,313		McDaniel, David L.	02/2000	
	AC	5,587,585		Eisen et al.	12/1996	
	AD	10/333,947		Shwartz et al.	1/2003	Application incorporated by reference
	AE	5,841,140		Mc Corskey et al.	11/1998	
	AF	6,242,743		De Vito et al.		
	AG					
	AH					
	AI					

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.*	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages Columns Lines Where Relevant Passages or Relevant Figures Appear	T6
		Office3	Number	Kind Code (If Known)				
	BA							
	BB							
	BC							
	BD							
	BE							
	BF							

NON PATENT DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue numbers), publisher, city and/or country where published.	T6
	CA	"ACC/AHA/ASNC Guidelines for the clinical use of Cardiac Radionuclide Imaging" American College of Cardiology Foundation and the American Heart Association, Inc. 2003. page 42, and the publication as a whole.	
	CB	ACR PRACTICE GUIDELINE FOR THE PERFORMANCE OF TUMOR SCINTIGRAPHY (with Gamma Cameras), American College of Radiology, revised 2000, effective Jan. 1, 2001, page 555 and the publication as a whole.	
	CC	Society of Nuclear Medicine Procedure Guideline for General Imaging, version 3.0, approved May 30, 2004. On page 5, under the heading "B. SPECT Imaging", paragraph numbered 1.d. and the publication as a whole.	
	CD	"Physics in Nuclear Medicine, Second Edition", James A. Sorenson and Michael E. Phelps, W.B. Saunders Company, Philadelphia, PA, 1987, ISBN 0-8089-1804-4, pages 307-309 and 424-425.	

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Sheet	2	of	3	Attorney Docket Number	0402US-Oaknin
-------	---	----	---	------------------------	---------------

Application Number	10/752,978
Filing Date	1/7/2004
First Named Inventor	Jacob Oaknin
Group Art Unit	2878
Examiner Name	Marcus Taningco

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages Columns Lines Where relevant passages or relevant figures appear
		Number	Kind Code (If Known)			
	AA					
	AB					
	AC					
	AD					
	AE					
	AF					
	AG					
	AH					
	AI					

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages Columns Lines Where Relevant Passages or Relevant Figures Appear	T6
		Office <sup>3</sup>	Number	Kind Code (If Known)				
	BA							
	BB							
	BC							
	BD							
	BE							
	BF							

**NON PATENT DOCUMENTS**

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue numbers), publisher, city and/or country where published.	T6
	CA	C.E. Metz, F.B. Atkins and R.N. Beck, "The Geometric transfer function component for scintillation camera collimators with straight parallel holes," Phys. Med. Biol., 1980, v. 25, p. 1059-1070	
	CB	D.L. Bailey, B.F. Hutton & P.J. Walker, "Improved SPECT Using Simultaneous Emission and Transmission Tomography", Journal of Nuclear Medicine, 1987, 28: 844-851	
	CC	L. A. Shepp and Y. Vardi, "Maximum likelihood reconstruction for emission tomography," IEEE Transactions on Medical Imaging, 1982, v. 1, p. 113-122	
	CD	K. Lange and R. Carson, "EM reconstruction algorithms for emission and transmission tomography," Journal of Computer Assisted Tomography, 1984, v. 8, p. 306-316	

Examiner Signature	Date Considered
-----------------------	--------------------

\*EXAMINER Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Sheet	3	of	3	Application Number	10/752,978
				Filing Date	1/7/2004
				First Named Inventor	Jacob Oaknin
				Group Art Unit	2878
				Examiner Name	Marcus Taningco
				Attorney Docket Number	0402US-Oaknin

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages Columns Lines Where relevant passages or relevant figures appear
		Number	Kind Code (If Known)			
	AA					
	AB					
	AC					
	AD					
	AE					
	AF					
	AG					
	AH					
	AI					

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages Columns Lines Where Relevant Passages or Relevant Figures Appear	T6
		Office <sup>3</sup>	Number	Kind Code (If Known)				
	BA							
	BB							
	BC							
	BD							
	BE							
	BF							

**NON PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue numbers), publisher, city and/or country where published.	T6
	CA	P.J. Green, Bayesian reconstructions from emission tomography data using a modified EM algorithm, IEEE Transactions on Medical Imaging, March 1990, v. 9, p. 84-93	
	CB	P.J. Green, On the use of the EM algorithm for penalized likelihood estimation, J. Roy. Statistical Society (B), 1990, 52, No. 3, pp. 443-452	
	CC	D. Geman and G. Reynolds, Constrained Restoration and the Recovery of Discontinuities, IEEE transactions on Pattern Analysis and Machine Intelligence, March 1992, v. 14, p. 367-383	
	CD		

Examiner  
SignatureDate  
Considered

\*EXAMINER Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.